

## DESCRIPTION

**ELASTAFLEX™ CR** is specifically created as a secondary containment liner for hydrocarbons including crude oil, diesel fuel, gasoline, and alcohols. This very economical 100% pure polyurea exhibits very high tensile strength and elongation. **ELASTAFLEX™ CR** is a unique blend of aliphatic and aromatic polymer chemistry with greater color/gloss retention and is more UV resistant than aromatic polyureas. Unlike most spray-applied polyureas, **ELASTAFLEX™ CR** is available with SPI's cutting-edge **ULTRA BOND™** technology. SPI's advanced **ULTRA BOND™** chemistry is coined "the duct tape molecule". **ULTRA BOND™** has the unique advantage of adhering to most properly prepared organic and inorganic (new and aged) surfaces without requiring a primer. Like duct tape, **ELASTAFLEX™ CR** with **ULTRA BOND™** gains adhesion over time.

## FEATURES

- Chemical Resistant.
- Superior color stability and gloss retention compared to aromatic polyurea elastomers\*.
- Eco-friendly, 100% solids, no solvents, and zero VOCs.
- Extended gel time for better flow-out providing a smooth, more uniform finish.
- High build up to any thickness in one application.
- Compliant with FDA/USDA for incidental food contact.
- ElastaFLEX™ CR liner is very supple with minimal shrinkage (less than 1% at 7 days).

## RECOMMENDED USES

- On geotextile fabric to form a monolithic liner.
- Primary and secondary containment.
- Steel and concrete tanks.
- Barge and ship holds.
- Waste water treatment facilities.
- Chemical transportation.

## COLORS

ElastaFLEX™ CR is available in standard colors (\*Sand, Light Grey, Medium Grey, and Black) Custom colors will be quoted upon request.

Note: ElastaFLEX™ CR is an aromatic polyurea; therefore, as with all aromatics, superficial oxidation will occur. Aliphatic urethane and other suitable topcoats can be used where long-term color stability and increased longevity in full sun exposure are of critical importance.

## PACKAGING

This product sold in standard 110 gallon drum and 550 gallon tote sets. Available in other container sizes, contact sales representative for further information. Non-standard containers may require a longer lead time.

## DRY PROPERTIES\*

55 mils (1.5 mm)*	
<b>Tensile Strength ASTM D638</b>	± 3100 psi (21 mpa)
<b>Elongation ASTM D638</b>	± 336%
<b>Hardness (Shore A) ASTM D2240-81</b>	94 ± 5
<b>Hardness (Shore D) ASTM D2240-81</b>	43 ± 5
<b>Service Temperature</b>	-60° - +200°F (-50° - +93°C)

\*All cured film properties are approximate since processing parameter, ad-mixture types, and quantities change physical properties of the cured elastomer. All samples for above tests were force cured 48 hours or aged for more than three weeks. Samples tested were neutral (untinted). It is recommended that the user perform their own independent testing.

## INDUSTRIES

- **Infrastructure** - Water, Transportation, Commercial & Industrial, Rehab/Retrofitting Communications.
- **Energy** - Oil & Gas, The Electric Grid, Nuclear, Wind, Hydro-Electric (Turbine).
- **Engineering** - OEM, Custom Product Formulations, Toll Blending, Bedliners & Equipment Coatings, Defense.
- **Environmental** - Groundwater Protection, Waste Encapsulation, Soil Stabilization, Pipe/Tank Decommissioning, Coal/Mining.

## WET PROPERTIES

<b>Solids by Volume</b>	100%
<b>Solids by Weight</b>	100%
<b>Volatile Organic Compounds</b>	0 lbs./gal (0 g/l)
<b>Theoretical Coverage DFT</b>	100 sq. ft. @ 16 mils/gal
<b>Weight per gallon (approx.)</b>	9.21 lbs. (4.17 kg)
<b>Number of coats</b>	1 - 2
<b>Mix Ratio (by volume)</b>	1 "A" : 1 "B"
<b>Viscosity</b>	A: 1000 ± 200 mPa.s B: 1000 ± 100 mPa.s
<b>Shelf Life Unopened Containers @ 60 - 90°F (15 - 32°C)</b>	6 Months

Minimum/maximum material/container temperature to supply proportioner "A" side is 85° - 95°F (29° - 35°C) "B" 70° - 80°F (21° - 27°C).

## CURING SCHEDULE

<b>Gel</b>	± 4 sec
<b>Tack Free</b>	± 6 sec.
<b>Post Cure**</b>	24 hour
<b>Recoat</b>	30 min. - 8 hours

\*\*Complete polymerization to achieve final strength can take up to several weeks, depending on a variety of conditions or product type. The samples for tests were sprayed with Graco HXP3 @ 2,500 psi (17 mpa) dynamic pressure. Primaries/Hose Heat 170°F (77°C) Graco MP Fusion Gun with 29/29 mixing module and .040 ceramtip.

## TEST INFORMATION

<b>Abrasion Resistance 1 kg. 1000 rev.</b>	CS-17	14.6 mg lost
	H-18	88 mg lost
<b>Mandrel Bend Test ASTM D522-93b</b>	Passed	Mandrel Size 1/4 - 60°F (-51°C)

## GENERAL APPLICATION INSTRUCTIONS

Apply ELASTAFLEX™ CR to only clean, dry, sound surfaces, free of loose particles or other foreign matter. A primer may be required, subject to type and/or condition of the substrate. Consult technical service personnel for specific primer recommendations and substrate preparation procedures.

Secondary containment liner application thickness will depend on the reagent contained. Contact your SPI representative for specific recommendations.

It is recommended that ELASTAFLEX™ CR be sprayed in multi-directional (north-south/east-west) passes to ensure uniform thickness.

The polyol "B" component must be thoroughly power mixed

each day, prior to use. Contact a SPI technician regarding proper mixing equipment.

Follow instructions attached to "A" and "B" containers.

## MIXING & THINNING

Thoroughly agitate the "B" components of this product prior to application. Use a SPI folding blade mixer, or equivalent equipment approved by SPI. Install mixer through the extra 2" bung hole provided on all "B" drums. Care must be taken not to cross contaminate the individual components with the mixing equipment; for the best mixing results, supply SPI mixer with 25 cfm of air at 100 psi. Thinning is not required. Using any thinner may adversely affect product performance.

## PROCESSING EQUIPMENT & SETTINGS

### MACHINES:

<b>GRACO</b>	<ul style="list-style-type: none"> <li>Reactor HXP3</li> <li>Reactor HXP2</li> <li>Reactor EXP2</li> <li>H25</li> </ul>	<ul style="list-style-type: none"> <li>20/35</li> <li>20/35 Pro</li> <li>H3500</li> <li>HV-20/35</li> </ul>
<b>PMC</b>	<ul style="list-style-type: none"> <li>GH-25</li> <li>GH-40</li> </ul>	<ul style="list-style-type: none"> <li>PHX-25</li> <li>PHX-40</li> </ul>
<b>SFE</b>		

### GUNS:

<b>GRACO</b>	<ul style="list-style-type: none"> <li>Fusion MP</li> <li>GAP Pro</li> <li>GX7-DI</li> <li>GX-8 Pro</li> </ul>	<ul style="list-style-type: none"> <li>P2</li> <li>P2 Elite</li> <li>P2 Elite "C"</li> </ul>
<b>GLASS CRAFT</b>		
<b>SFE</b>		

- Standard 1:1 ratio, heated, plural-component equipment developing a minimum of 1500 psi (10 mpa) dynamic pressure with heating capabilities to 175°F (79°C) will adequately spray ElastaFLEX™ CR.
- Pre-heater temperature should be at 160-170°F (71-77°C).
- Hose temperature should be at 160-170°F (71-77°C). A hose thermometer inserted under the insulation near the gun should read a minimum of 145-155°F (63-68°C).
- Physical properties will be enhanced when sprayed at higher pressure (3000 psi or more), utilizing an impingement mix gun such as MP Fusion or GX7-DI gun.

## LIMITATIONS

- ELASTAFLEX™ CR is for professional use only.
- ELASTAFLEX™ CR must be stored at temperatures between 60—90°F (15—32°C).
- Liquid temperature in containers/drums during application 70—100°F (21—38°C).

- Apply ELASTAFLEX™ CR when surface and air temperatures are above 40°F (5°C) and the surface temperature is at least 5°F (3°C) above dew point and rising.
- Minimum material/container temperature for spray application is 70°F (21°C).
- Avoid moisture contamination in containers. Containers should not be released if contamination is suspected. CO<sup>2</sup> created pressure can develop. Do not attempt to use contaminated material.
- Undried air exposed to liquid components will reduce physical properties of the cured coating.

Note: The material supplied is a two component system (component “A”/component “B”, which is used to formulate this product. The quality and characteristics of the finished polymer is determined by the mixture and application of the two components.

For the most up to date technical data sheet and/or safety data sheet visit our website at [www.specialty-products.com](http://www.specialty-products.com).

## GENERAL SAFETY, TOXICITY, & HEALTH

Safety Data Sheets are available for this coating material. Any individual who may come in contact with these products should read and understand the S.D.S. **CHEMTREC EMERGENCY NUMBER 1-800-424-9300 INT’L 1-703-527-3887.**

**WARNING:** Contact with skin or inhalation of vapors may cause an allergic reaction. Avoid eye contact with the liquid or spray mist. Hypersensitive persons should wear protective clothes, gloves and use protective cream on face, hands and other exposed areas.

**CLEAN UP:** Use DPM, NMP, and Polyclean.

**EYE PROTECTION:** Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates

a higher degree of protection: chemical splash goggles and/or face shield.

**SKIN PROTECTION:** Personal protective equipment for the body should be selected based on the task being performed; the risks involved, and should be approved by an industrial hygiene specialist before handling this product. Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

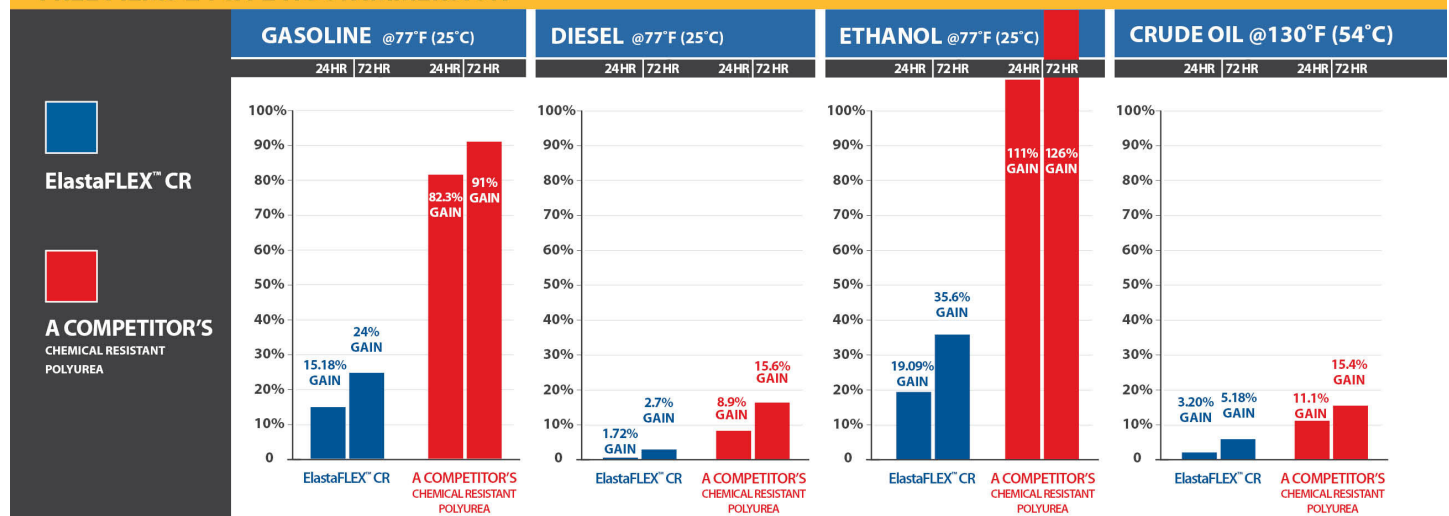
**RESPIRATORY PROTECTION:** Harmful if inhaled and may cause allergy or asthma symptoms. Ensure adequate ventilation. If the respirator is the sole means of protection, use a full-face supplied respirator. Use respirators and components tested and approved under appropriate government standards such as OSHA 29CFR 1910.134, NIOSH (US), or CEN (EU). Consider the application and environmental concentrations when deciding if additional protective measures are necessary.

**INGESTION:** Do not take internally. It is believed that ingestion of polymeric isocyanates would not be fatal to humans, but may cause inflammation of mouth and stomach tissue.

## CHEMICAL RESISTANCE CHART

PRELIMINARY

### FREE FILMS 24 & 72 HOUR IMMERSION





SEAMLESS SOLUTIONS FOR OVER 40 YEARS



### WARRANTY & DISCLAIMER

Specialty Products, Inc. has no role in the manufacture of the finished polymer other than to supply its two components. It is vital that the person applying this product understands the product, and is fully trained and certified in the use of plural-component equipment. Specialty Products, Inc., an Alaska corporation, warrants only that the two components of this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product are dependent upon the proper mixture and application of the components by the applicator. There are no warranties that extend beyond the description on the face of this instrument. Failure to apply the product within the parameters stated on this document shall void the warranty. SPECIALTY PRODUCTS, INC. MAKES NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR OF FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE. Specialty Products, Inc. makes no warranty as to the quality of any product modified, supplemented, tinted, or altered in any way after it leaves the manufacturing plant. Specialty Products, Inc. does not warrant that this product is suitable for use as a liner for potable water containers. Use of this product in a potable water container could be hazardous to health if it is improperly processed or applied. The liability of Specialty Products, Inc. for any nonconformity of the product to its technical specifications shall be limited to replacement of the product. The sole exclusive remedy of buyer, which is to have Specialty Products, Inc. replace any nonconforming product at no cost to buyer, is conditioned upon buyer notifying Specialty Products, Inc. or its distributor in writing of such defect within thirty days of the discovery of such defect. Specialty Products, Inc. shall not be liable for any direct, incidental, or consequential damages resulting from any breach of warranty. The data presented herein is intended for professional applicators or those persons who purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer. The aforementioned data on this product is to be used as a guide and is subject to change without notice. The information herein is believed to be reliable, but unknown risks may be present. Specialty Products, Inc. makes no warranties, expressed or implied, including patent warranties or warranties of merchantability or fitness of use, with respect to products or information set forth herein. Nothing contained herein shall constitute permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent. Accordingly, the buyer assumes all risks whatsoever as to the use of these materials and buyer's exclusive remedy as to any breach of warranty, negligence, or other claim shall be limited to the purchase price of the materials. Failure to adhere to any recommended procedures shall relieve Specialty Products, Inc. of all liability with respect to the materials and the use thereof

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SPI Website

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